SECTION 09900 - PAINTING

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 1 Specification Sections, apply to this Section.

1.2 SUMMARY

A. This Section includes surface preparation and field painting of exposed exterior items and surfaces as indicated.

B. Work includes painting and finishing of exterior exposed items and surfaces throughout project, except as otherwise indicated including but not limited to:
   1. Paint finishes on new and existing wood siding, moldings, trim, and other items as indicated.
   2. Repainting of Interior and Exterior Restored Wood ~~Windows and~~ Trim.
   3. Repainting architectural decorative metal and miscellaneous incidental metal.
   4. This Section also includes Historic Paint color investigation.
   5. Note: work of this section includes surface preparation, priming and finish coats of paint specified for new and existing surfaces as indicated.
   6. Note: Surface preparation may include the preparation of existing surfaces containing lead based paint in compliance with all applicable codes and regulations.
   7. Note: The work will include providing the paint sheen and multiple custom colors for various siding, trims, window and door surfaces, to be determined and as selected by the Architect based on analysis of Historic Paint Samples.

C. Related Sections include the following:

D. Related work includes rough and finish carpentry components to receive water repellant preservative and back-priming prior to assembly.

E. All new surfaces and existing surfaces to be patched or receive other work, that are exposed to view, shall be completely finished (or refinished) along the entire surface; from corner to corner.

F. Paint exposed surfaces, except where the paint schedules indicate that a surface or material is not to be painted or is to remain natural. If the paint schedules do not specifically mention an item or a surface, paint the item or surface the same as similar adjacent materials or surfaces whether or not schedules indicate colors. If the schedules do not indicate color or finish, the Architect will select from standard colors and finishes available.
   1. Surface preparation, priming, and finish coats specified in this Section are in addition to shop priming and surface treatment specified in other Sections.

G. Paint exposed surfaces, except where these Specifications indicate that the surface or material is not to be painted or is to remain natural. If an item or a surface is not specifically mentioned, paint the item or surface the same as similar adjacent materials or surfaces. If a color of finish is not indicated, Architect will select from standard colors and finishes available.

1.3 DEFINITIONS

A. General: Standard coating terms defined in ASTM D 16 apply to this Section.
   1. Flat refers to a lusterless or matte finish with a gloss range below 15 when measured at an 85-degree meter.
   2. Eggshell refers to low-sheen finish with a gloss range between 20 and 35 when measured at a 60-degree meter.

3. Semi-gloss refers to medium-sheen finish with a gloss range between 35 and 70 when measured at a 60-degree meter.
4. Full gloss refers to high-sheen finish with a gloss range more than 70 when measured at a 60-degree meter.

1.4 SUBMITTALS

A. Product Data: For each paint system indicated. Include primers.
1. Material List: An inclusive list of required coating materials. Indicate each material and cross-reference specific coating, finish system, and application. Identify each material by manufacturer's catalog number and general classification.
2. Manufacturer's Information: Manufacturer's technical information, including label analysis and instructions for handling, storing, and applying each coating material.
3. Certification by the manufacturer that products supplied comply with local regulations controlling use of volatile organic compounds (VOCs).

B. Samples for Verification: For each color and material to be applied, with texture to simulate actual conditions, on representative Samples of the actual substrate.
1. Provide stepped Samples, defining each separate coat, including block fillers and primers. Use representative colors when preparing Samples for review. Resubmit until required sheen, color, and texture are achieved.
2. Provide a list of materials and applications for each coat of each Sample. Label each Sample for location and application.
3. Submit three Samples on the following substrates for Architect's review of color and texture only:
a. Painted Wood: 8-inch- square Samples for each color and material on hardboard.

C. Qualification Data: For Applicator.

1.5 QUALITY ASSURANCE

A. Source Limitations: Obtain primers for each coating system from the same manufacturer as the finish coats.

B. Mockups: Apply benchmark samples of each paint system indicated and each color and finish selected to verify preliminary selections made under sample submittals and to demonstrate aesthetic effects and set quality standards for materials and execution.
1. Architect will select one surface to represent surfaces and conditions for application of each paint system specified in Part 3.
a. Other Items: Architect will designate items or areas required.
2. Apply benchmark samples after permanent lighting and other environmental services have been activated.
3. Final approval of color selections will be based on benchmark samples.
a. If preliminary color selections are not approved, apply additional benchmark samples of additional colors selected by Architect at no added cost to Owner.

1.6 DELIVERY, STORAGE, AND HANDLING

A. Deliver materials to Project site in manufacturer's original, unopened packages and containers bearing manufacturer's name and label and the following information:
1. Product name or title of material.
2. Product description (generic classification or binder type).
3. Manufacturer's stock number and date of manufacture.
4. Contents by volume, for pigment and vehicle constituents.
5. Thinning instructions.
6. Application instructions.

7. Color name and number.
8. VOC content.

B. Store materials not in use in tightly covered containers in a well-ventilated area at a minimum ambient temperature of 45 deg F. Maintain storage containers in a clean condition, free of foreign materials and residue.
1. Protect from freezing. Keep storage area neat and orderly. Remove oily rags and waste daily. Take necessary measures to ensure that workers and work areas are protected from fire and health hazards resulting from handling, mixing, and application.

1.7 PROJECT CONDITIONS

A. Apply waterborne paints only when temperatures of surfaces to be painted and surrounding air are between 50 and 90 deg F.

B. Apply solvent-thinned paints only when temperatures of surfaces to be painted and surrounding air are between 45 and 95 deg F.

C. Do not apply paint in snow, rain, fog, or mist; or when relative humidity exceeds 85 percent; or at temperatures less than 5 deg F above the dew point; or to damp or wet surfaces.
1. Painting may continue during inclement weather if surfaces and areas to be painted are enclosed and heated within temperature limits specified by manufacturer during application and drying periods.

PART 2 - PRODUCTS

2.1 PAINT REMOVAL MANUFACTURES

A. 3M Consumer Products Group
Box 33053
St. Paul, MN 55133-3053
612/737-6501 or 800/364-3577

B. Specialty Environmental Technologies, Inc.
4520 Glenmeade Lane
Auburn Hills, MI 48326
810/340-0400

2.2 PAINT MANUFACTURERS

A. Products: Subject to compliance with requirements, provide one of the products listed in other Part 2 articles.

B. Manufacturers' Names: Shortened versions (shown in parentheses) of the following manufacturers' names are used in other Part 2 articles:
1. Benjamin Moore & Co. (Benjamin Moore).
2. Diamond Vogel Paint Co. (Diamond Vogel).
3. ICI Dulux Paint Centers (ICI Dulux Paints).
4. PPG Industries, Inc. (Pittsburgh Paints).
5. Sherwin-Williams Co. (Sherwin-Williams).

2.3 PAINT REMOVAL MATERIALS, GENERAL

A. Commercial Paint and Varnish Remover such as "Citristrip" (Specialties Environmental Technologies, Inc.), "Safest Stripper" (3M), or approved equal.

B. Mineral Spirits:
   1. A petroleum distillate that is used especially as paint or varnish thinner.
   2. Other chemical or common names include Benzine* (not Benzene); Naphtha*; Petroleum spirits*; Solvent naphtha*.
   3. Potential Hazards: TOXIC AND FLAMMABLE.
   4. Safety Precautions:
      a. AVOID REPEATED OR PROLONGED SKIN CONTACT.
      b. ALWAYS wear rubber gloves when handling mineral spirits.
      c. If any chemical is splashed onto the skin, wash immediately with soap and water.

C. Turpentine:
   1. Typically used as a solvent and thinner.
   2. Potential Hazards: TOXIC AND FLAMMABLE.
   3. Safety Precautions:
      a. Work in a well ventilated area.
      b. Observe safety rules as turpentine is flammable, and the fumes can trip an ionization smoke detection system.
      c. Store soiled cloths in a metal safety container to guard against spontaneous combustion.

D. EQUIPMENT
   1. 000 steel wool.
   2. Steel or brass wire brushes.
   3. Stiff fiber bristle brushes.
   4. Putty knife or broad knife.
   5. Scrapers: Use scrapers of a variety of sizes and shapes as dictated by the surface detail encountered.
   6. Clean, dry cloths (cheese cloth or gauze).
   7. Nylon web scrubbing pads.

2.4 PAINT MATERIALS, GENERAL

A. Material Compatibility: Provide block fillers, primers, and finish-coat materials that are compatible with one another and with the substrates indicated under conditions of service and application, as demonstrated by manufacturer based on testing and field experience.

B. Material Quality: Provide manufacturer's best-quality paint material of the various coating types specified that are factory formulated and recommended by manufacturer for application indicated. Paint-material containers not displaying manufacturer's product identification will not be acceptable.
   1. Proprietary Names: Use of manufacturer's proprietary product names to designate colors or materials is not intended to imply that products named are required to be used to the exclusion of equivalent products of other manufacturers. Furnish manufacturer's material data and certificates of performance for proposed substitutions.

C. Colors: As selected by Architect from manufacturer's full range.

2.5 EXTERIOR PRIMERS

A. Exterior Wood Primer for Acrylic Enamels: Factory-formulated alkyd or latex wood primer for exterior application.
   1. Benjamin Moore; Moorwhite Primer No. 100: Applied at a dry film thickness of not less than 2.1 mils.
   2. Diamond Vogel; BU-Series Weather-Plate Acrylic Primer: Applied at a dry film thickness of not less than 1.5 to 2.0 mils.
   3. ICI Dulux Paints; 2001-1200 Dulux Exterior Latex Primer: Applied at a dry film thickness of not less than 1.6 mils.

4. Pittsburgh Paints; 72-1 Sun-Proof Exterior House & Trim Wood Primer Flat--Latex: Applied at a dry film thickness of not less than 1.6 mils.
5. Sherwin-Williams; A-100 Exterior Latex Wood Primer B42W41: Applied at a dry film thickness of not less than 1.4 mils.

B. Exterior Galvanized Metal Primer: Factory-formulated galvanized metal primer for exterior application.
1. Benjamin Moore; IronClad Latex Low-Lustre Metal & Wood Enamel No. 363: Applied at a dry film thickness of not less than 1.6 mils.
2. Diamond Vogel; V-Cote 200 Acrylic Maintenance Primer/Finish: Applied at a dry film thickness of not less than 2.0 to 3.0 mils.
3. ICI Dulux Paints; 4020-XXXX Devflex DTM Flat Interior/Exterior Waterborne Primer & Finish: Applied at a dry film thickness of not less than 2.2 mils.
4. ICI Dulux Paints; 4160-XXXX Devguard Multi-Purpose Tank & Structural Primer: Applied at a dry film thickness of not less than 2.0 mils.
5. Pittsburgh Paints; 90-709 Pitt-Tech One Pack Interior/Exterior Primer/Finish DTM Industrial Enamel: Applied at a dry film thickness of not less than 3.0 mils.
6. Sherwin-Williams; Galvite HS Paint B50WZ3: Applied at a dry film thickness of not less than 2.0 mils.

2.6 EXTERIOR FINISH COATS

A. Exterior Semigloss (Satin) Acrylic Enamel: Factory-formulated semigloss waterborne acrylic-latex enamel for exterior application.
1. Benjamin Moore; MoorGlo Latex House & Trim Paint No. 096: Applied at a dry film thickness of not less than 1.2 mils.
2. Diamond Vogel; BS-Series Weather-Plate Exterior Acrylic Latex Satin: Applied at a dry film thickness of not less than 1.5 to 2.0 mils.
3. ICI Dulux Paints; 2407-XXXX Dulux Exterior Latex Semi-Gloss Finish: Applied at a dry film thickness of not less than 1.3 mils.
4. Pittsburgh Paints; 78 Line Sun-Proof Semi-Gloss Acrylic Latex House and Trim Paint: Applied at a dry film thickness of not less than 1.2 mils.
5. Sherwin-Williams; SuperPaint Exterior Gloss Latex A-84 Series: Applied at a dry film thickness of not less than 1.4 mils.

2.7 INTERIOR PRIMERS/SEALERS – [NA]

2.8 INTERIOR FINISH COATS – [NA]

2.9 RELATED MATERIALS

A. Sealant materials: provide manufacturer's standard one-part, nonsag, mildew-resistant, paintable latex sealant of formulation indicated that is recommended for exposed applications on interior and protected exterior locations and that accommodates indicated percentage change in joint width existing at time of installation without failing either adhesively or cohesively.
1. Acrylic-emulsion sealant: provide product complying with ASTM C 834 that accommodates joint movement of not more than 5 percent in both extension and compression for a total of 10 percent.
a. Available products: subject to compliance with requirements, latex joint sealants that may be incorporated in the work include, but are not limited to, the following:
1) "AC -20," Pecora Corp.
2) "Sonolac," Sonneborn Building Products Div., Chemrex, Inc.
3) "Tremco Acrylic Latex 834," Tremco, Inc.
4) "SikaFlex" (Sika Corporation),
5) or other approved durable, flexible sealant that bonds well with the combination of latex and alkyd paints.

B. Water repellent preservative: Provide waterborne, paintable, water repellent preservative, formulated to provide protection against mildew, decay, rot, and stain, and to reduce swelling, warping and checking.
   1. Products: Subject to compliance with requirements, provide one of the products of the following manufacturers as indicated in the paint schedules.
      a. DAP Inc.
         2400 Boston St.
         Baltimore, MD 21224
         888-327-8477
         800-322-3195
      b. or approved equal.

C. Exterior Cleaning Solution Materials:
   1. Water.
   2. Household Bleach.
   3. “Jomax”; Zehrung, Chemrad Division.

PART 3 - EXECUTION

3.1 HISTORIC PAINT COLOR INVESTIGATION

A. Provide revels or exposure windows as required to determine the original paint color and sheen, using appropriate chemical solvent, paint remover and/or mechanical technique.
   1. Provide a written description of the investigation method/technique to the Architect for review and approval prior to conducting the investigation.

B. Provide documentation prior to the start of paint removal work to the Architect for review and approval prior to beginning removal and refinishing work. Documentation to include:
   1. Paint color and sheen inventory.

3.2 EXAMINATION

A. Examine substrates, areas, and conditions, with Applicator present, for compliance with requirements for paint application.
   1. Proceed with paint application only after unsatisfactory conditions have been corrected and surfaces receiving paint are thoroughly dry.
   2. Start of painting will be construed as Applicator's acceptance of surfaces and conditions within a particular area.

B. Coordination of Work: Review other Sections in which primers are provided to ensure compatibility of the total system for various substrates. On request, furnish information on characteristics of finish materials to ensure use of compatible primers.
   1. Notify Architect about anticipated problems when using the materials specified over substrates primed by others.

3.3 PREPARATION

A. Protection:
   1. General: Comply with recommendations of manufacturers of paint strippers for protecting surrounding building surfaces against damage from exposure to their products.
   2. Protect adjacent surfaces, including grass, shrubs and trees with paper, drop cloths and other means. Items not painted which are in contact with or adjacent to painted surfaces shall be removed or protected prior to surface preparation and painting operations.
   3. All waste material shall be collected at the end of each work day and disposed of in a manner consistent with local environmental regulations. It is considered Hazardous Waste.
   4. Work area shall be sealed to prevent the spread of paint dust and debris beyond the work site.

5. All rags shall be disposed of nightly and removed from the building.
6. Adequate ventilation should be provided in each area where solvents and strippers are used.
7. A fully charged fire extinguisher suitable for solvent fires shall be kept in each area where work is going on.
8. Contractor shall provide multiple fans with high CFM to move fumes out of the building and away from areas where work is being done.
9. Compressor motors, heat lamps, etc., must be of explosion proof type.
10. No spraying of solvents or strippers permitted unless specifically allowed by the manufacturer of the product being used.
11. After paint removal is complete, all areas around the site shall be cleaned of all paint dust and debris, and such debris shall be properly disposed of in a manner consistent with local environmental regulations. Vacuums used to clean up dust shall be equipped with High Efficiency Particulate Air (HEPA) filters.

B. General: Remove hardware and hardware accessories, plates, machined surfaces, lighting fixtures, and similar items already installed that are not to be painted. If removal is impractical or impossible because of size or weight of the item, provide surface-applied protection before surface preparation and painting.
   1. After completing painting operations in each space or area, reinstall items removed using workers skilled in the trades involved.

C. Cleaning: Before applying paint or other surface treatments, clean substrates of substances that could impair bond of the various coatings. Remove oil and grease before cleaning.
   1. Schedule cleaning and painting so dust and other contaminants from the cleaning process will not fall on wet, newly painted surfaces.

D. Removal of Existing Non-Lead Based Paint Materials in Preparation for Repainting:
   1. If the limited lead based paint survey indicates lead based paint, requiring regulated treatment is not present, paint removal may be accomplished by the following approved methods:
      a. Mechanical methods including dry scraping, sanding, or wire brushing. Use methods to limit dust debris.
      b. Heat guns and scraping of softened paint materials.
      c. Methods indicated below for removal of Lead Based Paint Materials.

E. Removal of Existing Lead Based Paint Materials in Preparation for Repainting:
   1. Where Lead Based Paint is indicated, avoid heat, mechanical, or abrasive techniques, as well as dry scraping, as the methods generate either lead fumes or excessive amounts of lead dust.
   2. If the limited lead based paint survey indicates lead based paint, requiring regulated treatment is present, paint removal may be accomplished by the following approved methods:
      a. Wet Mechanical Methods: Existing item preparation shall be wet scraping, sanding or wire brushing.
         1) Place a sheet of 6-mil polyethylene beneath the work area prior to preparation commencement.
         2) The debris generated must be collected and disposed in air tight, scalable containers as hazardous waste.
         3) Any visible debris shall again be vacuumed using a HEPA filtered vacuum. Any visible dust shall be wet wiped using a 5-10% solution of tri-sodium phosphate.
         4) All items shall be removed from the jobsite on a daily basis and placed in a locked dumpster for disposal.
      b. Chemical Methods (using Alternative Based Strippers):
         1) Surface Preparation: Use scrapers of a variety of sizes and shapes, whose edges have been rounded, to remove loose paint before removal using chemicals.
         2) Apply chemical stripper using a brush or roller. Follow manufacturer's instructions.
         3) Allow stripper to stand for length of time as recommended by manufacturer, depending upon the number of surface layers to be stripped; if necessary, cover with plastic sheeting to keep the stripper moist.

4) Using a broad knife or scrapper, remove paint and stripper from the surface.
5) Safely dispose of paint and stripper residue. Follow EPA regulations for disposal of lead-base paint.
6) Specifically for varnish buildup:
   a) Wet steel wool with solvent and rub over the wood surface to remove varnish buildup and to smooth out any checks in the surface.
   b) Replace steel wool frequently with clean, and continue the wiping process until a smooth surface is achieved.
7) NOTE: DO NOT USE WATER ON THE WOOD SURFACE.
8) Wipe wood with a clean cloth soaked in mineral spirits to remove chemical residue or other method as recommended by the chemical stripper manufacturer.
9) Allow to dry and dry-brush loose material from the surface using a short fiber bristle brush.
10) Repeat as necessary to sufficiently remove the previous coating.

F. Surface Preparation (General): Clean and prepare surfaces to be painted according to manufacturer's written instructions for each particular substrate condition and as specified.
1. Provide barrier coats over incompatible primers or remove and reprime.

G. Exterior Painting Preparation and Procedures for Existing Wood: Following the completion of all indicated repairs and renovations to the exterior, complete the following work in preparation for painting:
1. Secure all loose siding and trim using proper nailing materials and methods.
2. Set all existing popped and new nails, and fill.
3. Remove all loose or split caulking, putty, fillers and glazing compound.
4. Scrape, wire brush, and/or sand all loose, chipped and pealing paint; providing smooth, even and solidly adhering substrate. Sand as necessary to remove shoulders at edges of sound paint and provide smooth wood surfaces.
   a. Use only appropriate methods, as may be required to comply with requirements for preparation of Lead Based Paint Material surfaces.
5. Dust off surfaces and wipe with mineral spirits.
6. If mildew or fungal growth is present thoroughly wash all surfaces before painting. Use the following procedures for the removal of mildew and fungal growth.
   a. Mix a cleaning solution of the following proportions:
      1) 2 Gallons of water.
      2) 3 Pints of Household Bleach.
      3) 1 Pint of “Jomax”.
   b. Coverage: 5 gallons of this solution will cover approximately 1,000 square feet of wall surface.
   c. Place the above solution using a hand sprayer.
   d. Spray wall surface and allow to stand for 5 minutes. (Heavy staining may require light brushing.)
   e. Rinse with a garden hose sprayer, angled downward. (Do not use upward spraying or a power sprayer.)
7. Water repellent preservative: Apply water repellant preservative that is compatible with primer and finish paint coats, according to manufacturer’s written instructions.
   a. New wood: Apply water repellent preservative to all surfaces of new wood, prior to installation, by dipping, or if not possible by liberally brushing the entire piece, including ends. Repeat brush treatments to point of refusal. If material is further cut or worked after treatment, retreat finish cuts prior to priming and installation.
   b. Existing Wood: Apply water repellent preservative to all bare wood surfaces.
   c. After allowing water repellent preservative to dry as per manufacturer’s requirements, prime all edges, ends, faces, undersides, and backsides of wood.
8. Reset all exposed nail heads and treat with rust-inhibiting primer. Penatrol may be added to the primer to aid in preventing oxidation of old nail heads.

9. Caulk all cracks and joints. Provide small bead of sealant at juncture of all siding and trim. Prepare field installation sample of each type of condition for approval by the architect before proceeding with the work.

H. Exterior Painting Preparation and Procedures for New Wood: Complete the following work in preparation for painting:
   1. Water repellent preservative: Apply water repellant preservative that is compatible with primer and finish paint coats, according to manufacturer's written instructions.
      a. New wood: Apply water repellent preservative to all surfaces of new wood, prior to installation, by dipping, or if not possible by liberally brushing the entire piece, including ends. Repeat brush treatments to point of refusal. If material is further cut or worked after treatment, retreat finish cuts prior to priming and installation.
      b. After allowing water repellent preservative to dry as per manufacturer's requirements, prime all edges, ends, faces, undersides, and backsides of wood.
   2. Following installation; set all nails, and fill.
   3. Caulk all cracks and joints. Provide small bead of sealant at juncture of all siding and trim. Prepare field installation sample of each type of condition for approval by the architect before proceeding with the work.
   4. Spot prime following filling, puttying, and caulking.

I. Preparation Procedures for Galvanized Surfaces: Clean galvanized surfaces with nonpetroleum-based solvents so surface is free of oil and surface contaminants. Remove pretreatment from galvanized sheet metal fabricated from coil stock by mechanical methods.

J. Material Preparation: Mix and prepare paint materials according to manufacturer's written instructions.
   1. Maintain containers used in mixing and applying paint in a clean condition, free of foreign materials and residue.
   2. Stir material before application to produce a mixture of uniform density. Stir as required during application. Do not stir surface film into material. If necessary, remove surface film and strain material before using.
   3. Use only thinners approved by paint manufacturer and only within recommended limits.

3.4 APPLICATION

A. General: Apply paint according to manufacturer's written instructions. Use applicators and techniques best suited for substrate and type of material being applied.
   1. Paint colors, surface treatments, and finishes are indicated in the paint schedules.
   2. Seal tops, bottoms, and cut-outs of unprimed wood doors with a heavy coat of varnish or equivalent sealer immediately upon delivery to job.
   3. Finish exterior doors on tops, bottoms, and side edges the same as exterior faces.
   4. Do not paint over dirt, rust, scale, grease, moisture, scuffed surfaces, or conditions detrimental to formation of a durable paint film.
   5. Provide finish coats that are compatible with primers used.
   6. Sand lightly between each succeeding enamel or varnish coat.

B. Scheduling Painting: Apply first coat to surfaces that have been cleaned, pretreated, or otherwise prepared for painting as soon as practicable after preparation and before subsequent surface deterioration.
   1. The number of coats and film thickness required are the same regardless of application method. Do not apply succeeding coats until previous coat has cured as recommended by manufacturer. If sanding is required to produce a smooth, even surface according to manufacturer's written instructions, sand between applications.
   2. Omit primer over metal surfaces that have been shop primed and touchup painted.
   3. If undercoats, stains, or other conditions show through final coat of paint, apply additional coats until paint film is of uniform finish, color, and appearance. Give special attention to ensure that

edges, corners, crevices, welds, and exposed fasteners receive a dry film thickness equivalent to that of flat surfaces.

4. Allow sufficient time between successive coats to permit proper drying. Do not recoat surfaces until paint has dried to where it feels firm, and does not deform or feel sticky under moderate thumb pressure, and until application of another coat of paint does not cause undercoat to lift or lose adhesion.

C. Application Procedures: Apply paints and coatings by brush, roller, spray, or other applicators according to manufacturer's written instructions.

1. Brushes: Use brushes best suited for type of material applied. Use brush of appropriate size for surface or item being painted.
2. Rollers: Use rollers of carpet, velvet-back, or high-pile sheep's wool as recommended by manufacturer for material and texture required.
3. Spray Equipment: Use airless spray equipment with orifice size as recommended by manufacturer for material and texture required.

D. Open window sash for painting; all sash edges and frame surfaces this exposed shall be painted. Leave sash open until paint is dry. Operate sash through full range of travel after paint is dry to ensure free operation; remove excess paint and repaint if required.

E. Minimum Coating Thickness: Apply paint materials no thinner than manufacturer's recommended spreading rate to achieve dry film thickness indicated. Provide total dry film thickness of the entire system as recommended by manufacturer.

F. Prime Coats: Before applying finish coats, apply a prime coat, as recommended by manufacturer, to material that is required to be painted or finished and that has not been prime coated by others. Recoat primed and sealed surfaces where evidence of suction spots or unsealed areas in first coat appears, to ensure a finish coat with no burn-through or other defects due to insufficient sealing.

G. Pigmented (Opaque) Finishes: Completely cover surfaces as necessary to provide a smooth, opaque surface of uniform finish, color, appearance, and coverage. Cloudiness, spotting, holidays, laps, brush marks, runs, sags, ropiness, or other surface imperfections will not be acceptable.

H. Stipple Enamel Finish: Roll and redistribute paint to an even and fine texture. Leave no evidence of rolling, such as laps, irregularity in texture, skid marks, or other surface imperfections.

I. Completed Work: Match approved samples for color, texture, and coverage. Remove, refinish, or repaint work not complying with requirements.

3.5 CLEANING

A. Cleanup: At the end of each workday, remove empty cans, rags, rubbish, and other discarded paint materials from Project site.

1. After completing painting, clean glass and paint-spattered surfaces. Remove spattered paint by washing and scraping without scratching or damaging adjacent finished surfaces.

3.6 PROTECTION

A. Protect work of other trades, whether being painted or not, against damage from painting. Correct damage by cleaning, repairing or replacing, and repainting, as approved by Architect.

B. Provide "Wet Paint" signs to protect newly painted finishes. After completing painting operations, remove temporary protective wrappings provided by others to protect their work.

1. After work of other trades is complete, touch up and restore damaged or defaced painted surfaces. Comply with procedures specified in PDCA P1.

3.7 EXTERIOR PAINT SCHEDULE

A. Incidental Metal: Provide the following finish systems over incidental exterior metal.
   1. Semi-Gloss, Acrylic-Enamel Finish: 2 finish coats over a rust-inhibitive primer.
      a. Primer: Rust-inhibitive metal primer applied at spreading rate recommended by the manufacturer to achieve a total dry film thickness of not less than 1.5 mils.
         1) Devoe: 4160 Series Devguard Multi-purpose Metal Primer.
      b. First and Second Finish Coats: Same as wood window and trim finish.

B. Wood Trim: Provide the following finish systems over exterior wood trim:
   1. Semigloss (Satin) Acrylic-Enamel Finish: Two finish coats over a water repellant preservative and primer.
      a. Water repellent preservative: treat all surfaces of new wood and exposed, bare areas of existing wood with paintable, water repellant preservative; approved by the primer and finish paint manufacturer for the indicated use.
      b. Primer: Exterior wood primer for acrylic enamels.
         or
      c. Primer (new redwood or cedar): for new redwood or cedar; as back-primer and primer to receive finish coats.
         1) Cabot: “Problem Solver Primer”.
      d. Finish Coats: Exterior semigloss (Satin) acrylic enamel.
         1) Colors and Sheen: Provide Sheen and multiple custom colors for various siding, trims, windows and doors, to be determined and as selected by the Architect based on analysis of Historic Paint Samples.

3.8 INTERIOR PAINT SCHEDULE – [NA]

END OF SECTION 09900